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ABSTRACT

In recent years a movement has developed at the high school level to address issues of cost and educational improvement through Proficiency-Based Credit Assessment (PBCA). With PBCA, students can receive credit by demonstrating their proficiency without actually taking a course. A national mail survey conducted by the Utah State Office of Education to determine the current scope and use of PBCA in secondary school education found that 16 states (40% of the 40 respondents) had a policy that provided direction for use of PBCA for high school credit, but only five states had specified tests or evaluation procedures. In general, the responsibility for determining how credit could be earned was left to the districts. A survey of the 40 Utah school districts (80% response rate) determined that seven districts were currently using PBCA, and three had developed assessment instruments independently of state resources. Recommendations include: (1) centralized PBCA assessment procedures; (2) a system development committee; (3) use of end-of-course tests and item pools to create assessments; (4) emphasis on subject methodology over subject-matter content; (5) a needs assessment/marketing component; (6) making PBCA attractive to district educators; (7) making PBCA attractive to students; and (8) recognizing and promoting external resources in developing programs. Ten references are listed, and three appendices provide the surveys used in the study. (SLD)

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PROFICIENCY-BASED CREDIT ASSESSMENT

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of Education

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of Public Instruction

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PROFICIENCY-BASED CREDIT ASSESSMENT

A NATIONAL AND STATEWIDE SURVEY OF USE

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October, 1991

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A: SURVEY OF STATE EDUCATION OFFICES PROFICIENCY-BASED CREDIT ASSESSMENT POLICIES AND PRACTICES

B: UTAH SCHOOL DISTRICT SURVEY ON PROFICIENCY-BASED CREDIT ASSESSMENT POLICIES AND PRACTICES

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The 1990's will find educators trying to resolve the conflict between shrinking educational budgets and the need to expand students' educational horizons. Students and educators alike are faced with an unprecedented information explosion; there is more to teach and more classes to take than available class time in a student's educational career. In addition, students are increasingly able to acquire information on their own time through means other than school course work. In recent years, a movement has developed at the high school level to address these issues through the use of Proficiency-based Credit Assessment (PBCA). With PBCA, students can receive credit for courses by demonstrating their proficiency without actually taking a particular course, thereby meeting student needs, satisfying credit requirements, and freeing up class time for other or more advanced courses.

The use of PBCA in Utah and the development of future goals and procedures for PBCA is consistent with the objectives of *A Shift in Focus*, which outlines the need to restructure Utah's educational system and create a more student-focused system (Strategic Planning Commission, 1988). Interest in exploring PBCA is a logical outcome from a series of recent educational reforms, including the development of the state core curriculum, more stringent graduation requirements, and new emphasis on concurrent college enrollment and AP programs. This project was commissioned by the Utah State Office of Education (USOE) to determine the current scope and use of PBCA in secondary school education, nationally and locally, and to recommend possible options for future PBCA in Utah.

Throughout the country as well as within Utah, educators have explored the concept of PBCA with varying degrees of success. Many questions surround the issue of PBCA. How is proficiency assessed? Should course credit be awarded for demonstrated proficiency or should such proficiency be used merely to place a student in a higher level course? Is PBCA appropriate for all courses and, if not, for which? What differences are there between PBCA in high school and the existing credit-by-examination programs (e.g., CLEP) offered upon entrance to many colleges and universities?

Other issues are more political or administrative in nature. If PBCA is adopted, at what level in the educational system are the determinants of proficiency decided? Should individual schools develop their own systems of PBCA? Should policy be decided at the district level? Or should the State Office of Education adopt a uniform set of procedures and assessment methods to be used by all districts and their schools?

To obtain answers to these and other questions, the project sought to provide a careful assessment of current efforts to incorporate PBCA into policies and procedures at the school, district, and state levels. The project included a review of research literature on issues related to the use of PBCA and comprehensive surveys of Utah school districts and state education

offices around the country to develop a state-of-the-art picture of current and potential uses of PBCA.

The remainder of this chapter provides a review of available resources, including those from the literature, and the synopsis of proficiency based credit assessment which was used to define PBCA for survey respondents. Chapters Two and Three of the report give the results from the state and Utah school district surveys, respectively. Finally, Chapter Four gives a set of recommendations concerning options for future state policy and procedures in Utah for the use of PBCA.

REVIEW OF AVAILABLE RESOURCES

Literature Review

The first step in addressing the objectives of this project was to determine its scope by defining what the term Proficiency-based Credit Assessment would and would not include. The current state high school graduation requirements policy in Utah allows for the use of PBCA to award high school credit:

> A. A unit of credit or fraction thereof shall be given upon satisfactory completion of a course or learning experience in compliance with state course standards. Students also may complete a course on a performance basis in which case assessment of mastery will be the responsibility of the local boards of education. Credit can be awarded only once for a specific required course with the same content during the secondary school experience.
>
> B. Credit may be earned in any of the following ways:
>
> (1) successful completion of a course;
>
> **(2) demonstrated proficiency, via preassessment;** [emphasis added]
>
> (3) demonstrated mastery of approved courses outside of the school day or year;
>
> (4) concurrent enrollment in approved post-secondary training institutions;
>
> (5) demonstrated mastery of approved correspondence or extension courses; or
>
> (6) upon application, demonstrated mastery in special experimental programs.
>
> (Utah State Board of Education, 1986, p. 2)

This project addressed the second option in the list above "demonstrated proficiency via preassessment". We have further defined PBCA for this project as being any policy or system which awards secondary school credit to students who are considered to be proficient

in an area without having taken the designated academic course. Credit may be awarded based on proficiency tests, presentations (e.g. portfolios), or independent projects.

We have not used the more common term, credit-by-examination, in describing PBCA so that we could also include assessment methods in addition to written examinations. This general definition includes awarding credit for any type of direct assessment of the students' proficiency in courses they have not yet taken but for which they wish to get credit.

To understand more clearly what PBCA *is*, it is important to understand what it *is not*. Below are brief summaries of related topics and how they impact on our understanding of PBCA.

Minimal Competency Exams — Minimal competency exams generally involve testing students (especially prior to graduation) to determine whether they meet minimal standards of skills in math, reading, and writing. Generally in the literature, 'competency test' refers to minimal competency exams while 'proficiency test' is more likely to refer to PBCA.

Advanced Placement Exams — At the other end of the spectrum are Advanced Placement (AP) exams. AP courses are college-level courses taught in high school. A national AP testing, scoring, and reporting program is available to assess the students' performance in these classes; colleges and universities may use AP test scores to determine whether to award college credit for the equivalent college course. The AP system differs from PBCA in that students are placed in AP courses because they are considered to be at a higher proficiency level, but they do not receive credit for the less difficult high school course that they skip. A student may challenge an AP test without taking the related course; this *would* constitute PBCA.

Dual Enrollment — With dual or concurrent enrollment, students may take courses at a college or university while also attending high school. In many cases the student will get both high school and college credit for the college course. This does not fall into the category of PBCA, as the college course experience is substituted for the high school course experience; credit is not awarded via preassessment.

Equivalent Credit — Equivalent credit policies generally grant credit for required academic courses, such as science and mathematics, for completion of non-required vocational courses. These policies were instituted in the face of increasing credit requirements for graduation which left less time for vocational education. Equivalent credit differs from PBCA in that vocational course work is accepted in lieu of the required academic course without directly assessing the individual student's proficiency in that academic course.

College Level Examination Program (CLEP) — Under the CLEP program of the College Entrance Examination Board, students can receive college credit upon college entrance by demonstrating their knowledge in specific subject areas with an acceptable score on a proficiency test. These proficiency tests are standardized subject tests used at many colleges and universities. CLEP is virtually never used at the high school level.

The process of defining PBCA and developing a comprehensive understanding of the surrounding issues required an in-depth literature review. While few relevant studies on PBCA at the secondary school level were found in the published literature, there were a few related topics which shed some light on the issues involved in formulating policies and procedures for PBCA.

Colorado Study on Alternative Ways to Award Credit

A search of the literature found many references which focused on a variety of alternatives to meet graduation requirements, such as those listed above, which were not part of our definition of PBCA. However, a recent study did include PBCA in a list of alternative methods for meeting graduation requirements. The Colorado Community College and Occupational Education System surveyed Colorado school districts and state educational offices about alternatives used to fulfill minimum course requirements for graduation (Anderson, Sharpe, & Cornette, 1986).

While the focus of the report was on designing equivalent credit policies based on suggested essential skills for science and mathematics, the surveys also examined the extent to which districts and states allowed students to "test out" of classes. The results showed that eight (5%) of the 166 Colorado school districts surveyed reported that "testing out" was an alternative method used to meet academic requirements. Of the eight that used the "testing out" alternative, six said it was used to waive a graduation requirement and two said it was used to grant credit. The authors of the Colorado study also conducted a national survey of State Directors of Vocational Education (39 of 57 surveys returned) and State Directors of Education (33 of 52 returned), and a similarly small percentage of the respondents reported allowing a "testing out" option to meet academic requirements. As PBCA was not the focus of the Colorado survey, it provided little relevant information beyond the statistics presented here. However, the results, now five years old, do provide an interesting perspective from which to view the results of the present survey.

Lessons from the CLEP Literature

The literature on the College Level Examination Program (CLEP) of the College Entrance Examination Board provided some insight into the issues which may be involved with PBCA at the secondary school level, especially credit-by-examination practices (Grandy

& Shea, 1976; The College Board, 1980; and The American Council of Education, 1981). While not all proficiency-based assessment systems involve written examinations, many of the evaluation issues that are pertinent to college level written examinations are directly applicable to credit-by-examination at the secondary school level.

A pertinent issue in credit-by-examination is the extent to which *the assessment device* is appropriate for the course material being challenged. The American Council of Education (1981) advises that the appropriateness of the assessment device is based on the extent to which the exam is both current and performance-oriented. According to the American Council of Education, "any CLEP test that has been used for five years without revision should be reviewed and scrutinized by potential users" (p. 44). In addition, the panel encourages the development of tests in a format other than multiple-choice to measure actual performance or demonstration of skills. These same recommendations may also be applied to PBCA at the secondary school level.

Another key issue at the college level is the extent to which the same course material is taught from one school to the next under a given course title or whether there are differences which make it difficult to assess proficiency fairly in specific subject areas. In Utah, we have the advantage of having the goals and anticipated outcomes of each core course defined in a reasonably comprehensive and clear manner in the State Core Curriculum. Thus, ideally, it should be possible to create a PBCA system for American History in one school which could be used to assess proficiency in American History in any other school in the state.

Survey of Testing Companies

As part of the review of available resources, ten major test publishers were contacted by mail and phone and queried about their published tests or assessment devices which could be or have been used for PBCA. We received information from five of the ten test publishers contacted: Scholastic Testing Service, Inc.; Educational Testing Service; the Psychological Corporation; CTB MacMillan/McGraw-Hill, and American Testronics.

With the exception of American Testronics, all of the publishers responding indicated that they did not publish any tests that were considered appropriate for use in determining proficiency for high school course credit. However as one respondent, John T. Stewart, Sr., Product Manager for Norm-Referenced Tests at CTB MacMillan/McGraw Hill, commented concerning the use of their end-of-course tests:

> We have no way of knowing how these tests are used by the schools that purchase them. We do not promote their use as proficiency measures, although it is possible that they may be used in that way by some schools. Having only 42 to 50 items, these tests do have relatively large standard errors of measurement. . . Their value

> in serving as sole criterion for the award of class credit is thus quite limited. (Letter dated July 19, 1990)

Thus, while schools may be using these norm-referenced tests to measure proficiency, Stewart pointed out that there are clear limitations to their use.

American Testronics, however, has published subject tests which are being used for PBCA at the high school level. American Testronics currently has available 19 high school subject tests in the areas of English, Math, Science, and Social Studies. Hawaii's State Office of Education has recently adopted the American Testronics Algebra I test for PBCA. American Testronics stated that the tests were originally developed as end-of-course tests, but acknowledged that they were recently being used as PBCA for adult education classes in Michigan. Grade level norms for the tests are currently being developed, however, American Testronics was not considering establishing standardized cutoff scores for awarding proficiency-based credit. According to American Testronics, the cutoff scores used would depend on school districts' objectives for using the tests.

Before using end-of-course tests from any source as PBCA, it is important to examine the issues raised in our review of the literature and survey of test publishers. Many of the instruments developed by American Testronics are only 40-50 items long (American Testronics, 1990). In light of the cautions given by Stewart of CTB MacMillan/McGraw-Hill, there may be some validity problems with using these assessments as the sole criterion to award credit. In addition, depending on the extent to which states have specific versus general curriculum guidelines, it may not be appropriate to use general commercial tests developed on a national level to determine course credit for state-specified core curricula.

Alternatives to Credit-by-Examination

While "testing out" or "credit-by-examination" is probably the most common form of PBCA, alternative forms of evaluation may be applied to the assessment of proficiency as well. While most PBCA is paper-and-pencil and frequently multiple choice, a number of alternative forms may also be appropriate. For example, oral examinations may be more appropriate for evaluating proficiency in a foreign language. Another alternative to assessment by written examination is portfolio assessments.

The differences between portfolio and traditional written evaluations primarily involve the evaluation of knowledge versus application. A portfolio assessment may be useful, for instance, when PBCA is requested to award students credit for in-depth understanding of a specific subject area (e.g., an artistically talented student, a mechanically talented student). Through portfolios of their work, students can be assessed on what they can do as well as what they know. The disadvantage of a portfolio PBCA is that it may require more

assessment and evaluation time than the average written examination. While there are very few examples in the literature of PBCA based on demonstrations or portfolios, they are important options to consider.

SYNOPSIS OF PROFICIENCY BASED CREDIT ASSESSMENT

The resource review plus interviews with key personnel locally enabled us to build a brief written synopsis of the status of PBCA. The synopsis includes fictitious scenarios to illustrate the different circumstances which may elicit the need for proficiency-based assessment to award credit. The synopsis accompanied the state and district surveys mailed out during the project to familiarize the respondents with our specific definition of PBCA. As the synopsis is also a summary of the status of PBCA based on the literature review, it is included here.

In this world of escalating technology and rapid change, opportunities for students to gain skills have grown outside of as well as within the traditional school environment. Such opportunities enhance student development in an economical manner. One approach to the changing nature of students' needs and proficiencies is proficiency-based credit assessment. The following examples illustrate the potential uses and issues surrounding proficiency-based credit assessment:

TOM:

Tom is a junior who works part-time as a computer programmer. He taught himself programming when he was fourteen and now is proficient enough to take on paid projects. His high school requires one credit in Information Technology to graduate, but Tom feels that all the courses that are available to fulfill the requirement are boring and elementary. Should he be required to take a course in an area in which he is already so proficient? Is it possible for him to get credit based on his level of experience instead?

CINDY:

Cindy is a gymnast who is working toward qualifying for the next Olympics. She works out three hours a day and needs every school period available to get in her regular classes. Should she have to take a physical education class to fulfill that graduation requirement? Can she get proficiency-based physical education credit if she presents a portfolio of her gymnastics skills?

SALLY:

Sally, a freshman, has always enjoyed independent study and is especially interested in biology and other sciences. She has her own lab at home and does college level work. She is uncomfortable and bored in the classroom environment and often skips class. Having spent summers in France, she also speaks French fluently. Her parents have asked that she be allowed to "test out" of science courses and French so that she can still have time to work independently while also completing her graduation requirements.

The scenarios above are examples of situations involving some type of proficiency-based credit assessment. In each case, there is the question of whether or not the student should receive course credit for demonstrated proficiency without actually taking a required course. Policies regarding the use of proficiency-based credit assessment may vary from district to district and state to state. The survey which we have asked you to complete and return to us is part of a research study designed to address the current use of and future interest in district and state policies which allow for proficiency-based credit assessment.

In filling out the following survey, please consider and include all policies and actions which have enabled students to receive credit for a course by demonstrating proficiency in some manner other than actual class attendance. Proficiency-based credit assessment may possibly include the following options:

- Awarding credit for required general courses to students who already have specialized advanced knowledge in that area (such as physical education, music, dance, etc.). Credit may be awarded based on presentations (e.g. portfolios) or other means of assessment. In these cases, proficiency is assumed to be greater than the level taught in most courses in the area.
- Students are allowed to "challenge" a class in which they feel they are already proficient to get course credit without taking the class. Credit may be awarded

based on proficiency tests, presentations (of portfolios), or independent projects. This option may also include cases where students pass an Advanced Placement (AP) examination for college credit without having taken the AP course. In this case, the student would also receive H.S. credit for the AP course.

The general definition of proficiency-based credit assessment that each of the above examples fall under is: "Any policy or system which awards secondary school academic credit to students who are considered to be proficient in that area without having taken the designated academic course". Please refer to this definition and the entire synopsis of proficiency-based credit assessment as you complete the following survey.

SURVEY DEVELOPMENT AND PROCEDURES

A survey of all state education offices addressed the use of PBCA nationally. The contents of the national survey were based on the review of the literature and available resources. The national survey was mailed out to the District of Columbia and to all forty-nine state education agencies outside of Utah, and collected data concerned with general issues and information surrounding the use of proficiency-based assessment in each (see Appendix A). The education agencies were asked to describe the extent to which PBCA activities and resources were used in their schools and any restrictions or provisions attached to their use. Further, each agency was asked to provide results from any studies that may have been done to determine the success of PBCA in their state.

The state survey package included the PBCA synopsis presented in Chapter One and a letter from the Superintendent of the Utah State Office of Education. State educators were requested to complete and return the survey to The Institute for Behavioral Research in Creativity (IBRIC) within three weeks. After four weeks, a follow-up letter was sent out to those districts who had not yet returned their survey.

RESULTS

Of the fifty state surveys sent out, 40 (80%) were completed and returned. Of those returned, 17 (43%) had additional enclosures of policy statements and/or sample assessment devices. In describing the results of the national survey, responses to the general survey will be discussed first, followed by examples of proficiency-based assessment systems which are in place or have been used in the past in different states.

Due to the general lack of published literature on the topic, we expected less familiarity with the concept of PBCA than was reported. Of those states responding to the question concerning the extent to which they were familiar with PBCA, 83% said they were somewhat to very familiar with the concept, thus the project was very timely. A substantial number of those surveyed asked to receive feedback from this project to further familiarize themselves with PBCA, as it was a topic being explored in other state offices as well.

PBCA Studies by Other State Offices

While other state offices indicated an interest in our findings, we also asked what studies and projects had been done or were currently being investigated on PBCA by other states. Six of the state offices reported that they had or were in the process of conducting studies

on PBCA, but only one could send us a report of a completed study. Rhode Island conducted a pilot study in 1987 to test the feasibility of offering a proficiency examination option to the computer literacy graduation requirement. Rhode Island surveyed nine other states to determine their practices and policies surrounding PBCA, though the rationale for the selection of these nine states was unclear. Of those states surveyed, the only state to have a system similar to that proposed in Rhode Island was Illinois. Details of Illinois' PBCA system will be covered later in this report based on their responses to the state survey.

The computer literacy exam was piloted in Rhode Island on a sample of 10 school districts. They attempted to identify the number of students who would be eligible to take the PBCA option in computer literacy as well as estimate how many of them would be able to pass. The exam included a performance component as well as a written test, and a passing score was set at 65% correct. Because the performance component required extensive individualized supervision, the PBCA was difficult to schedule and monitor. The conclusions from this pilot study were that potential benefits and problems existed with PBCA and that virtually no testing out programs existed in other states (a finding influenced by the small number of states they surveyed). Based on the one computer literacy exam piloted, they also concluded that only an extremely small number of Rhode Island students could pass a test without first having formal high school study. An important point demonstrated by this study is the utility of conducting a needs assessment for different courses before implementing a PBCA option to determine the number of students who would be eligible for the PBCA credit.

State PBCA Policies and Procedures

Of the 40 states that responded to the survey, 16 (40%) had a statewide policy which provided direction concerning the use of PBCA options for high school credit. However, of the states that had such a policy in place, only five had specific statewide assessment methods (e.g., specific tests or evaluation procedures) which every district used to award proficiency-based credit. Some states like Hawaii and New York had specific assessment instruments for different courses that were used statewide to grant proficiency-based credit. However, for the most part, if a state PBCA policy did exist, the responsibility for awarding course credit and determining how students must demonstrate proficiency was left up to the local school districts.

A further question on the survey asked whether the state offices were interested in developing a PBCA policy, if they had not already done so. The majority of state offices indicated they already had a policy in place or were interested in developing one, but nine (20%) said that they were *not* interested. Of those states not interested in formulating a statewide policy, a few reported that it was state policy that such issues be settled at the

district level. Most comments around this question, however, echoed a lack of information about the use of PBCA in other states and communicated positive interest in the future of PBCA options in their state.

Use of PBCA Within States

State Offices were further asked to estimate the proportion of individual school districts in their states that supported or used PBCA options. Of those that responded, a sizable percentage (42%) didn't know. Of those that knew the level of use of PBCA in their districts, 28% said that none of the school districts supported or used PBCA options. Some states, like Maryland, commented that state policy precluded PBCA options, since credit was defined only on the basis of the amount of time spent in a course.

Of the remaining states responding, 20% said very few to some districts used PBCA. While 40% of the states surveyed said they had a statewide PBCA policy, only 10% said most to all districts did use PBCA. These states generally had PBCA policies with implementation and control of procedures at the state level, rather than at individual districts.

Example Policies and Programs

A small number of states had PBCA programs that were currently providing local districts with uniform policies, procedures, and assessment devices used in making credit award decisions. Those states that did not have procedures implemented uniformly across districts may have had a statewide PBCA policy, but they often did not know how or whether it operated in the individual districts. Florida reported having had a PBCA system operational in years past, but it had been discontinued. In presenting the descriptions of each PBCA program, we can examine what aspects of the Florida program made it unsuccessful and what has been working in the handful of programs operational around the country.

Florida

An interesting case study on PBCA is Florida. Several years ago the State Office of Education there instituted a statewide PBCA program entitled the Secondary Level Examination Program (SLEP). The law permitting proficiency exams in that state, however, was repealed in the mid-eighties. The reason given to us by the Florida State Office was that the SLEP was not popular with educational administrators. The few districts that did use it were not using it for the original purpose of acceleration, but were using it to help low-achieving students in trouble get credit. The main problem with the assessment system was that districts couldn't get valid, reliable tests. They found, as our research on nationally

normed tests concluded, that national tests were inadequate for assessing proficiency as they couldn't keep up with curriculum changes.

The conclusion reached by the state of Florida was that SLEP didn't really work, and now other alternatives are being used to help accelerate students. What specifically didn't work in the Florida SLEP program that distinguished it from the programs in states like Illinois, New York, Hawaii, and Louisiana? As the descriptions of programs in a few other states will indicate, PBCA has been implemented successfully, but specific parameters appear to be required for its success.

Illinois

Illinois has a statewide policy and proficiency examination for only one required course — Consumer Education. The Annual Consumer Education Proficiency Test was developed by the State Board of Education and furnished to school districts. From the description of this practice in the Illinois School Code, demonstrated proficiency is sufficient for a waiver of the consumer education requirement, but does not involve awarding credit based on the assessment.

Waiver policies such as Illinois' differ from credit-by-examination policies in that students who pass the test are granted exemption from a required course but are not awarded credit (pass/ fail or letter grade) for their demonstrated proficiency. Such a policy gives students more time in which to take elective rather than required courses, but does not necessarily promote early graduation, as the number of credits needed to graduate is not reduced. The descriptions of statewide PBCA programs that follow are all based on credit-by-examination policies.

New York

One example of successful implementation of a statewide testing program for proficiency-based credit is the Regents Examination Program of the New York State Office of Education. The Regents Examination Program in New York is approximately a century old and is one example of policy and practice being uniform and centralized at the state level rather than being implemented through different assessment procedures by autonomous districts. Regents Examinations are available for almost every academic subject and use multiple testing options: essay, multiple choice, and (in the case of math) computation of problems.

Students in New York have the option of earning a regular high school diploma or a Regents Diploma. A Regents Diploma requires more courses, such as a three-credit second language. Scheduling problems which inhibited some students from earning a Regents

diploma, however, motivated the State Education Department to search for alternative means to award credit to provide equal educational opportunities for students with various academic interests. In 1984, the New York State Education Department adopted the Action Plan to Improve Elementary and Secondary Education Results in New York (University of the State of New York, 1984), one principle of which was that "students should be provided the opportunity to meet substantial parts of diploma requirements through examination" (p. 10). The Regents Examinations, achievement tests based on state courses of study in various subjects similar to Utah's End-of-Course tests, were used to meet this objective.

Hawaii

Hawaii's State Office of Education has had a statewide testing program with an extensive credit-by-examination policy since 1978 when the State Board of Education adopted a regulation that provided for PBCA. Their use of PBCA is based on the philosophy that credit should awarded for progress in learning and not merely for time spent.

Hawaii is currently in the process of conducting an evaluation to determine the need for modification and expansion to include more subject areas in their PBCA program. They have credit examinations for eight subject areas, primarily foreign languages (Chinese, French, Hawaiian, Japanese, Spanish and Tagalog); the only tests that are not for foreign language are Typewriting and Algebra I. They recently adopted the American Testronics High School Subject Test (HSST) for Algebra I, because the Algebra I PBCA developed by the State was considered too easy. Hawaii is moving toward including an oral examination component in their PBCA for foreign languages.

Credit examinations are administered annually and scored by the state office of education. Generally, students take these tests at the end of the eighth grade upon entering high school. On the average, of the 10,000 — 12,000 entering freshman, 2000 opt to take a credit examination. Of those that elect the PBCA option, 70% pass and are awarded credit. Hawaii's cutoff scores are set at the 81st percentile. This state-centralized program appears to work well, in part because the small state is a one district system.

Louisiana

Louisiana, like Hawaii, has an extensive PBCA program in place for which state-developed proficiency examinations are available for a variety of courses. Currently, credit examinations are available for Computer Literacy, Algebra I, English I, II, III, and IV, and some foreign languages; examinations for Algebra II, Geometry, Consumer Math, Computer Science, and Business Math are being developed. Eventually, Louisiana plans to develop a credit examination for every required course in the curriculum. The PBCA program in

Louisiana has been backed by legislation for a competency-based education program since 1976, and credit examinations have been available since 1984.

Louisiana, like many other states, is moving toward more performance-based rather than knowledge-based criteria. Each PBCA for the English courses involves a writing component, which the teachers are trained to evaluate. In addition, a hands-on computer science examination being developed involves writing a program.

Like Hawaii's program, the credit examinations are used primarily to award credit to students entering high school. The option is also useful in placing in high school classes students who have previously been educated via a home study program. Of the credit examinations currently available, Algebra I and Computer Literacy are the most popular. Of the approximately 40,000 entering freshmen, 3000 take the Algebra I PBCA and 2000 take the Computer Literacy. Also like Hawaii, approximately 70% of those who opt to take the exams pass.

Louisiana has always had a stronger, more centralized State Department of Education than most states. While PBCA is a program mandated and developed by the state, individual districts are allowed to develop PBCA for courses if one is not already available, but they must be submitted for approval to the State. The State sets the cutoff scores for the test to insure equivalency among districts.

The PBCAs in Louisiana are administered and scored by the districts with a specific set of procedures to follow to insure security. Each district must submit the date of administration and the names of the students taking the tests; upon receiving the exam, key template, and answer sheets, the district makes a copy for each student taking the test. All materials are sent back to the State office and checked to insure the correct number are returned. Security procedures for the PBCA are being revised to include a test generator for each exam so that tests will be generated from an item bank for each performance objective and each test will be different. Thus, if security is breached and a copy of the test is disseminated, it will be of little use to future test takers.

Conclusions

In examining the four states with working PBCA programs and contrasting them with Florida, a state that repealed its PBCA program due to lack of success, one important feature appears to distinguish those that functioned well from those that didn't and from state policies not actively being practiced. That difference is a state-mandated program involving state-developed assessments with procedures for awarding credit that are practiced uniformly by all districts. Other features that distinguished Florida from the successful PBCA programs were: 1) not all Florida districts used PBCA and those that did used them

for purposes that were contradictory to the state's goals; and 2) there was no uniform system of assessment devices available which clearly assessed the content of the curricula. In developing recommendations for the use of PBCA in Utah, it is important to recognize these distinctions as factors which may add to the success of future policies and procedures.

SURVEY DEVELOPMENT AND PROCEDURES

Utah's forty school districts were surveyed to determine current and planned uses of PBCA in the state educational system. A pilot version of the district survey was developed first and used in interviews with selected districts to insure that the procedures were appropriate for the rest of the districts and to elicit suggestions regarding how to facilitate effective responses. Selected for pilot testing were two urban and two rural districts along the Wasatch Front. The pilot survey was modified as needed in the process of collecting data through these interviews. The information collected through the pilot interviews was used in the study as well.

The refined surveys were mailed to each of the district offices in the State of Utah that had not been included in the pilot survey. (A copy of the survey is attached as Appendix B.) The survey addressed two main topics: 1) how proficiency-based assessment was currently being used (including for which courses); and 2) how would district educators like to see proficiency-based assessment used in the future. More specifically, district educators were asked to indicate the extent to which they were familiar with PBCA, to describe what they felt the state office's role should be in the creation of future policies and procedures, and to indicate whether their current district policy allowed for PBCA.

Those respondents who indicated that they had a district policy in place were asked to send copies of the policy statement or a brief description of the policy and to respond to an additional survey form concerning the type of assessment systems used (see Appendix C). Those who indicated they did not have policies and procedures for PBCA were asked to indicate whether students could obtain proficiency-based credit on a case-by-case basis, the extent to which they were interested in developing a proficiency-based credit policy, and to which courses they felt such a policy would be applicable in the future.

The district survey was accompanied by a letter from the superintendent of the Utah State Office of Education. District superintendents were asked to return the completed survey within three weeks to IBRIC. After four weeks, a follow-up letter was sent out to districts who had not returned their survey to remind them of its importance.

RESULTS

Of the forty districts surveyed, 32 (80%) returned completed surveys. Of those returned, seven (22%) completed Form A to describe specific PBCA systems currently in use. In describing the results of the district survey, the responses and comments to the general survey

will be discussed first, followed by more detailed descriptions of what specific districts are doing in the area of PBCA.

Utah school district offices were asked many of the same questions as were asked of the state offices of education in the national survey, but they were also asked to provide more specific information. For each question on the district survey, respondents were asked either to respond to a multiple choice scale, respond with a written comment, or both. Where appropriate, comments were content analyzed to determine the general consensus of opinion.

Of the 29 districts that responded to the question concerning their level of familiarity with PBCA, 14 (49%) said they were quite to very familiar with the issue, 11 (38%) said they were somewhat familiar, and only 4 (14%) said not at all or only a little familiar. As was mentioned earlier in this report, the current policy on graduation requirements from the State Office includes the option of awarding proficiency-based credit via preassessment without specifying a state-mandated procedure for preassessment. When asked whether the state needed to provide additional information about the different ways proficiency-based credit can be obtained, the majority of districts responding (84%) said yes.

District Policies

As was the case with the survey of the state education offices, Utah school districts were asked to what extent they had policies and provisions for PBCA and to what extent they were interested in developing such policies. Overall, seven districts (23%) said that they have policies in place which allow for PBCA. All of these districts are currently using some form of PBCA, the specific similarities and differences of which will be discussed later in this report.

Of the districts that did not have a policy in place to award PBCA, 27% said that it was possible for students to receive PBCA credit on a case-by-case basis in their district. When these districts were asked if they wanted to adopt a PBCA policy, 96% indicated that they were interested in considering such a policy, were currently formulating one, or already had one. Only 4% said they were not at all interested. Clearly, Utah's school districts are actively pursuing alternative ways to award credit.

Exploratory Studies or Projects

A handful of districts (5) have not yet developed a policy for PBCA, but are currently exploring the use of this alternative in specific ways. For instance, while San Juan School district does not yet have a policy in place, it is currently piloting a unique senior portfolio program related to PBCA which it hopes to implement as policy next year. Under this pilot

program, seniors are being asked to create a portfolio related to their accomplishments and abilities to be presented to teachers and possibly people from the community.

Currently, this program does not conform to our definition of PBCA as the portfolio performance is intended as a requirement for graduation rather than as an assessment opportunity used to award credit for a course which has not been taken. However, San Juan's exploration in the area of portfolio assessment is useful in that they are developing an assessment technique which may be more successfully incorporated into PBCA plans for certain courses than the traditional written assessments.

Courses Appropriate for PBCA

In addition to asking districts if they were interested in considering formulating a policy for PBCA, we also asked them to comment on the types of courses that would be most appropriate for PBCA. Most of the respondents felt that PBCA would be an appropriate option for almost all courses, especially math and foreign languages; some, however, felt PBCA would be most appropriate for non-academic classes (i.e., P.E., the arts, vocational education). Overall, the districts were open to possibilities and not restrictive in their consideration of a range of future applications of PBCA.

Extension or Correspondence Courses

An issue which is related to PBCA, but not necessarily a part of policies and procedures to address this issue, is the use of college extension or correspondence courses (not including concurrent enrollment) to award credit. Overall, 80% of the districts have between 1 and 20% of their students obtaining credit through this option; 57% of the districts surveyed feel the use of this option should be encouraged, 7% felt it should be discouraged, and 37% were neutral about the use of this option. This issue was included in the survey to determine the extent to which this option was available and used by district and the sentiments attached to the practice.

Districts' Views on the State Office's Role in PBCA

Two survey questions addressed the current and future role of the State Office of Education in the development of policies concerning PBCA. Districts were asked to comment on how current or future state policies might facilitate or restrict district proficiency-based credit procedures. From their responses, it is clear that the majority of the districts would like the state to provide guidelines and resources but are wary of losing district autonomy. Similarly, when asked if they would support the development and implementation of a statewide policy which would outline procedures for awarding proficiency-based credit, most responded positively while also suggesting that there be

opportunities for evaluation and input from the local districts. Some of the districts' comments concerning this issue were:

> The state should give local districts authority in this area. The state should serve as a resource and a disseminator of information about what other districts are doing. The state should not set standards nor have a regulatory function.

> I support this concept and encourage the state to establish a policy which leaves districts with freedom to manage the program according to their needs.

> We would support research and planning with a draft proposal of the plan available for district evaluation.

From these responses it appears that districts would like guidance from the state in developing specific assessment procedures, but they also want the autonomy deemed necessary to meet their individual district needs. In addition, there is the question as to whether the use of PBCA by districts would result in a financial incentive from the state or loss of state monies. These issues need to be addressed in the planning of future use and development of PBCA by the state office.

Current PBCA Systems in the State of Utah

A number of districts described systems which are in place to award proficiency-based credit. The systems vary in terms of the extent to which assessment instruments have been developed and the number of courses to which they apply. Below are descriptions by districts of the various practices, their histories, and usage.

Physical Education

North Summit School District currently has a PBCA option available for physical education; however, it does not involve a specific written assessment. About half to three-quarters of the students at North Summit High School apply for and receive credit for

physical education based on satisfactory performance and time in practice for sports. The instructors or coaches are responsible for evaluating and awarding credit for physical education. While there is no evaluation form used, the credit is based on an assessment of demonstrated competency.

USOE End-of-Course Tests

Ogden. Ogden School District has a somewhat unique PBCA option which has been available since the 1989-90 school year. Under this policy, credit can be awarded for 11th or 12th grade courses in Senior English, U.S. History, Science, Trigonometry, or Analytic Geometry based on the student's performance on the SAT, ACT, or (in the case of Trigonometry and Analytic Geometry) the State End-of-Course tests for those subjects.

The performance standard set for Senior English was scores in the top 25% on the ACT English or the SAT Verbal tests. Likewise, passing scores for U.S. History and Science were, respectively, in the top 25% on the ACT Social Studies score and the ACT Science score. For Trigonometry and Analytical Geometry, the USOE End-of-Course tests in these subjects was used as a preassessment, and a passing score for credit was set at 80% for both tests. At this point, no one has asked to test out of these two courses, so it remains to be seen if this is an appropriate cutoff score.

At the time of the survey, the only course that students had attempted to test out of was Senior English; six students applied for the option and all six successfully were awarded credit. In light of the issues raised in the literature review concerning the extent to which it is appropriate to use general national achievement tests to assess proficiency in specific high school courses, the PBCA practices at Ogden using ACT and SAT scores may be less valid than those using assessments designed specifically for the curriculum. However, the use of the State End-of-Course subject tests invites further exploration, as these tests were designed specifically for Utah's state core curriculum.

South Sanpete. South Sanpete school district awards proficiency-based credit based on the USOE End-of-Course tests and also uses some that are developed by individual teachers. Since 1987, 12 students have elected this option and all 12 have received PBCA credit. A passing score on these assessments was set at 80% correct. It appears that this policy is used mostly to award credit to students who wish to elect the early graduation option.

Daggett. Daggett School District uses USOE End-of-Course tests in a different manner from Ogden and South Sanpete. Using USOE item pools from the End-of-Course Testing Program and other resources, teachers in Daggett School District develop criterion-referenced PBCA. Daggett began using these procedures in 1986. Since that time, five

students have elected the PBCA option and all five have received credit. While the cutoff scores vary according to course, the minimum passing score is 75%. Students who elect the PBCA option are encouraged to do self-study and are given a printout of recommended study material before the test.

PBCA Systems Involving District Developed Assessments

Two school districts, Salt Lake City and Weber, have developed written tests specifically for the purposes of determining proficiency-based credit for the Consumer Health core course requirement. Two other districts, Jordan and Washington, have developed assessment instruments for multiple courses. The programs in these districts are described in more detail to illustrate what PBCA procedures have been created by districts on their own.

Salt Lake City. Salt Lake City School District implemented their PBCA policy in the 1989-90 school year. Under their program, the Consumer Health credit-by-examination option is available for 10th graders. Out of the 49 students who have attempted this option since its implementation, three have received proficiency-based credit. To receive credit for the class, students must achieve 90% of the highest score based on pilot testing. The Consumer Health test was developed by the district curriculum committee.

Weber. Weber School District has been using their proficiency-based credit option since 1977. Their Consumer Health proficiency-based credit test was developed by course instructors and was updated in 1989 to reflect the state core standards. Students in grades 10 through 12 can elect this credit-by-examination option. Approximately 25% of the students try, and only 5% of those pass. Approximately 500 students have received proficiency-based credit through this option since its implementation. Credit is awarded to students who score 70%, the first standard deviation above the mean score of the students who have completed the class.

Jordan. Since 1986, Jordan School District has had an extensive PBCA program entitled High School Entry Level Placement (HELP). HELP exams are available to students in grades 9-12 for credit in Biology, Algebra II, and U.S. Studies. By passing these HELP tests, students can also skip a basic course to take an Advanced Placement (AP) class. HELP tests in Information Technology, Participation Skills and Techniques, and Lifetime Fitness are also available; however, a passing score on these tests results in a waiver of the graduation requirement for the courses but no award of credit.

The procedures for administering the HELP exams at Jordan emphasize maximum security; students must go to the district office to take them and they are not allowed out of the office. In the past three years, fewer than 100 students have opted to take the HELP exams. Most of these students (75) have attempted the Biology I exam and only 15 (20%)

passed. While most of the exams were developed by the district office, the Biology I exam is based on a 1983 College Board achievement test in Biology. Out of the 100 items on this test, 55 correct is considered a passing score. On the U.S. History test developed by teachers in the district, credit is awarded for scores of 80% correct or above. The requirement is 55% on the Algebra II test. Jordan has done some work in validating these tests, especially with regard to item analysis.

Washington. Since 1983, Washington School District has had a proficiency-based assessment system which gives 11th and 12th grade students the option of obtaining credit by examination in Health, Language Arts, Chemistry, Geology, Biology, Consumer Math, Algebra I & II, U.S. History, and Consumer Education. There are no prerequisites for electing this option. Since its implementation, 94 students have taken tests for the appropriate courses; of that number, only 20 have been awarded proficiency-based credit.

The examinations used at Washington were developed by the teachers and administrators in the district and are administered to the students under district supervision. The passing score to obtain credit is set at 80% — a standard which was established during the development of the tests on students taking the required classes. No more than three units of proficiency-based credit earned through this method may be counted toward graduation.

CONCLUSIONS

A substantial number of assessment procedures have been developed to provide PBCA options for a variety of courses within the school districts of Utah. Many of these options take advantage of the End-of-Course tests and item pools already available from the State Office of Education. The tests and the item pools from the State Office differ in that the tests have been validated as assessment devices but the item pools have not. The advantage of using the End-of-Course tests is that PBCA can be applied to any course for which an End-of-Course test has been developed; this includes most of the core curriculum.

A handful of districts has responded to the need for PBCA with a remarkable level of innovation. Salt Lake, Weber, Jordan, and Washington school districts have developed assessment instruments which are independent of state resources. How these resources are accessed and used at the state and district levels will have substantial bearing on the future of proficiency-based credit assessment in Utah.

Proficiency Based Credit Assessment is emerging as one response to pressures on the educational system from low budgets, crowded classrooms, increased learning opportunities outside of school, and a constantly increasing rate of knowledge growth. With PBCA, students can receive credit for a course by demonstrating their proficiency without actually taking the course. In this way, student needs are met, credit requirements are satisfied, class time is freed up for other or more advanced courses, and, in general, better use is made of scarce educational resources. The current project surveyed the extent to which PBCA is being used across the country and within Utah. The following sections of this chapter present a summary of the key findings of the project and recommendations based on those findings.

SUMMARY

Literature Review

Only a limited number of references to PBCA were found in the professional literature. The most directly analogous program described was the College Level Examination Program (CLEP), which has been extensively used throughout the nation. Despite its broad use, certain difficulties have been recognized, namely, the extent to which nationally standardized tests match local curricula and the extent to which exams are current in assessing appropriate student knowledge and skills.

One test publisher, American Testronics, was found to publish high school level subject matter tests that have been used in various states to grant credit. Grade level norms for the tests are currently being developed in 19 different subject matter areas. Because these tests have only 40 to 50 items per area, they may not be sufficiently comprehensive or reliable. However, credit could be given on the basis of such tests used in conjunction with student projects or other information about student accomplishments.

A study of Colorado school districts found that approximately 5% of those districts surveyed permitted "testing out" as a method for meeting academic requirements. The limited information found in the literature made our survey of state offices throughout the country especially helpful.

Survey of State Education Offices

Of the 40 states that responded to the national survey, 16 (40%) had a statewide policy which provided direction for the use of PBCA options for high school credit. However, of those states, only five had specified statewide assessment methods (e.g., specific tests or evaluation procedures) which every district used to award proficiency based credit. Some states, like Hawaii and New York, had specific assessment instruments that were used statewide to grant proficiency based credit for selected courses. However, for the most part, if a state PBCA policy did exist, the responsibility for awarding course credit and determining how students must demonstrate proficiency was left up to the local school districts. Only nine states said that they were not interested in developing a PBCA policy. However, some reported that such issues were settled at the district level, while others reported a lack of information about PBCA procedures and policies.

The programs of the five states with reported PBCA experience were examined. Four of these states had working programs and reported some success in using them; one state, Florida, previously had a PBCA program but repealed it due to lack of success. The primary distinction between the Florida program and the operational programs was that Florida did not include control of how districts used PBCA or how performance was assessed.

Survey of Utah School District Offices

Thirty-two (80%) of the 40 Utah districts returned completed surveys and seven of those described specific PBCA systems that they were currently using. Assessment devices have been developed to provide PBCA options for a variety of courses within the school districts of Utah. Some take advantage of end-of-course tests or item pools already available from the State Office of Education.

A handful of districts has responded to the need for PBCA with a high level of innovation. Salt Lake, Weber, Jordan, and Washington Districts have developed assessment instruments which are independent of state resources.

OVERVIEW OF PERTINENT ISSUES

Our review of the literature and surveys of PBCA practices within Utah and around the country have revealed many issues important to the decision to implement PBCA policies and procedures. These issues include educational values, the relationship between state and district offices, and other factors which determine whether PBCA is used for its intended purposes and whether it will be a valid, reliable, and cost effective method for meeting

student needs. The next sections of this report present a discussion of these issues. How controversy around these issues is resolved may add or detract support from the potential use of PBCA in Utah. Recommendations based on the findings of the project follow this discussion.

Acceleration of Students

Should students be encouraged to move through the school system at an accelerated pace and thereby graduate early? Or should they be encouraged to accelerate and thereby be able to include more advanced courses in their school career? One outcome of a successful PBCA program is an increase in the number of students who need further intellectual stimulation because they have demonstrated their competency in specific high school courses. Fortunately, options are available to help these students. In Utah, the legislature recently adopted a policy which encourages early graduation. In addition, Utah is the highest state in the nation in number of students per capita who take AP courses (Nelson & Ross, 1989). Clearly, Utah has been committed in the past to offering a variety of avenues for acceleration of students within the constraints of existing educational procedures.

However, an important factor within this issue is the way in which districts receive funding. Currently, districts receive funding based on enrollment; if students graduate early, districts lose money. But, if districts can keep students in high school by offering more advanced learning opportunities, they will not experience this drop in revenue, and students' needs will be met. Large districts have more capability to offer a variety of advanced courses. If proficiency-based credit assessment is viewed by the State primarily as a tool to increase early graduation, some districts may be less supportive because they need to serve all students with an already limited budget.

Perceived Value of PBCA Versus Course Work

How does the value placed on different courses of study (e.g., vocational versus college preparatory) affect the potential use of PBCA for those courses? Should a PBCA system be used only for either vocational or academic courses? One view is that PBCA should be used to test out of academic courses; another is that it should be used only for non-academic courses. At issue is the value of academic versus vocational course work. Thus, the value placed on the different courses of study may affect PBCA decisions, and, ultimately, the value of PBCA credit.

The purpose for which PBCA is used will reflect the value assigned to PBCA credit versus traditional course credit. As an example, using PBCA as an easy way to get students through required courses that might otherwise inhibit their graduation changes the nature of PBCA from a standard of excellence to minimum competency.

Educators must ask themselves not only how they want PBCA to operate but also how they want it to be valued. The perceptions of the value of academic versus vocational course work partially influences this issue. If one course of study is considered less relevant than the other and educators feel that PBCA should be used only for the less relevant one, then they are, in effect, making a negative value judgment concerning the validity of PBCA versus actual course work. Or, educators can establish PBCA as a high standard of excellence so that achieving course credit through PBCA is a sign of motivation to pursue an individualized course of study.

The Cost of PBCA

How does the use of PBCA affect the bottom line of school budgets? The cost of maintaining the current status is reflected in misallocation of resources. Valuable student potential is wasted when students must take classes covering subject matter they already largely know rather than classes offering new, more advanced material; school resources are wasted by not providing further education for those students. One of the assets of PBCA is the potential gain in moving students through the system more efficiently while better meeting their needs. This asset can only be realized when enough students elect PBCA options to offset the costs of development, operational procedures, and program maintenance. To be cost effective in the long run, PBCA costs, volume of use, and return need to be carefully managed.

Locus of Control

The national survey revealed that one of the distinctions between different applications of PBCA across states was the degree to which districts were autonomous in their use of it. Those states with a centralized state-run program were able to respond to the survey with a great deal of information about the kinds of assessments used and the resulting level of participation. Those states with statewide policies in place but few or no statewide PBCA procedures had little information about how the policies were implemented by various districts. At present, Utah has state policy supporting the use of PBCA but does not have a statewide program; implementation varies greatly across districts, and, prior to this survey project, there was little information available.

Responses to the district survey indicated PBCA options have varied greatly in their reliance on state resources versus the development of district resources. Some school districts have used the state end-of-course tests as assessment while others have committed substantial effort to the development of district PBCA devices. PBCA programs would have increased potential for success if personnel and resources at both the district and state level were involved in the development of PBCA options.

Out-of-School Learning Resources

While public high schools offer a wider variety of elective and required courses now than in the past, there are also several competing sources of formal education available to students. University extensions and community education centers offer night and summer courses in various topics which are of interest to high school students.

Students currently moving through the school systems undoubtedly are the most computer literate since the introduction of personal computers. Many school systems may be unable to keep up with the vast learning opportunities available through the use of computers while also providing all students with a minimum standard of computer literacy. However, the most computer-proficient students have already acquired more skill with computers than is required by most high schools, and they have increased their subject matter knowledge in other areas through access to computer data bases.

The most recent Statewide Educational Assessment (Fox, Nelson, Ellison, Fairfield, & Ross, 1990) asked students in the 5th and 11th grades to describe their experience in using a computer; a majority at each level (56% and 57%, respectively) has access to a home computer. In addition, more students in 11th grade (20%) than in 5th grade (7%) commented that they hadn't learned to use a computer yet or at least not very well. Not only do most high school students already know how to use a computer, but these numbers will increase due to greater learning in and outside of the current elementary schools. Thus, high schools need to prepare to address a range of skills in the area of computer literacy and other areas accessed through computer skills.

Students have always had learning resources outside of school through their parents and the community in which they live. What and how much they learn depend on the value and importance assigned to specific knowledge by the family and the community. For example, a student whose parent is a career mathematician is more likely to have advanced math skills as the parent and family are more likely to consider the acquisition of math skills to be important. A student from an Hispanic family who lives in a predominantly Hispanic community may be fluent in both English and Spanish due to the importance of communicating in both languages.

To what extent do we recognize the contribution of these varied outside learning resources? Addressing this question should include consideration of any conflict between the current specified courses required for graduation and the value placed on those and other subject areas by students, their parents, or their community. Parents may consider one area of knowledge so important that private tutors and coaches are employed to improve the student's performance in that subject. Conflict occurs when the allocation of students' time to certain subject areas is greater than either the educational system or the student and his

home environment deem appropriate. The solution is to determine when the students' time is being consumed unnecessarily on repetitive material.

By giving students the opportunity to demonstrate proficiency obtained by outside learning in lieu of course credit, educators would acknowledge the value of subject areas to students, parents, and the community and also provide room in students' educational careers for further pursuit of individualized learning experiences.

Support

Are educators willing and able to establish a system to recognize the learning that goes on outside of school classrooms by awarding course credit for such learning? Educators may not be supportive of awarding credit via PBCA for out-of-school learning because they don't consider such learning to be relevant or sufficiently comprehensive. To a great extent this is a change issue. For PBCA to be effective, educators must be willing to reexamine traditional values and alternate methods of learning. Educators must be ready for this change and willing to facilitate it before implementation of a PBCA program can succeed.

RECOMMENDATIONS

The crux of the matter, then, is whether Utah educators really want to encourage and include as part of students' educational careers the learning that occurs outside of the classroom. If they do, then serious consideration should be given to the following set of recommendations for future PBCA options within the state of Utah.

1. Centralize the PBCA assessment procedures at the state level.

In many states, including Utah, there is sentiment among educators (and sometimes state policy) which assigns the control and degree of utilization of PBCA to individual districts. However, one of the issues we determined may contribute to the success of actual implementation of the state policy is a uniform statewide PBCA system and uniform procedures. The only states that can say they have widespread and successful use of PBCA are those that have a statewide system which includes assessment instruments, state level scoring and/or security, and state-mandated procedures for the use of the assessment devices for awarding credit.

The appropriateness of assessment instruments for evaluating knowledge of specific high school curricula can influence the success or failure of an assessment system. When a

statewide curriculum exists yet different instruments are used by individual districts to assess the same subject area, those differences in assessment devices may affect student outcomes. We recommend that one statewide PBCA system be adopted with the development of assessment instruments, scoring, and security procedures centralized at the state level.

2. Form a PBCA system development committee of representatives from districts with existing PBCA procedures.

Utah has extensive resources already in place from which to build a statewide PBCA system. Our most important resource is the work already done by individual districts in building assessment devices. A committee of personnel from selected districts and the State Office of Education could explore shared resources, procedures, plans, etc., to build PBCAs and to develop policies for PBCA opportunities that capitalize upon existing knowledge and that are responsive to student needs. In addition, the committee needs to be sensitive to the needs of the individual districts in developing a statewide system.

3. Use end-of-course tests and item pools to create PBCAs.

As mentioned previously, one problem with using different assessment instruments with one uniform statewide core curriculum is that the different instruments will differ in how appropriate they are for assessing the specific standards and objectives. The existence of a statewide end-of-course testing program with tests and item pools written specifically for Utah's core curriculum is an asset to PBCA. The state will have a head start in building instruments which will effectively address the core curriculum standards if it incorporates the end-of-course testing material into PBCA development.

4. Emphasize subject methodology more than subject-matter content (how you *do* something in a field rather than what you *know*) in the design of PBCAs.

The procedures for assessing proficiency often have focused on knowledge of subject content rather than application of subject methodology. Recently, there has been a movement toward increased use of performance-based evaluations. While assessments of subject-matter content are often considered to be more efficient performance-based assessments are considered to be more applicable to what students need to learn from various courses. Computer literacy is a specific course for which performance-based assessments are being developed as more appropriate than content-based assessment.

We recommend that, where possible, performance-based evaluations be included in developing statewide PBCAs.

5. Build in a needs assessment/marketing component in the PBCA exploration process.

A key issue in determining the cost and future utility of a PBCA program is to assess the need for and interest in PBCA options in high schools around the state. For PBCA to be cost-effective, it must be an option that will be elected by a sufficient number of eligible students. Finding out what out-of-school learning experiences students have in different subject areas will help guide decisions on which courses should have a PBCA option and will help to insure cost-effective program use. To this end, we recommend developing a needs assessment of 9th through 11th grade students which could simultaneously serve as a marketing program to promote the use of PBCA among eligible students. From this data, the state could obtain aggregate information about the extent to which PBCA is needed and could be used for each high school course.

6. Make PBCA attractive to district educators.

A new program must be accompanied by incentives for its use that offset any costs. One potential source of resistance to PBCA involves the relationship between district educators and the State Office of Education. If district educators do not find the program attractive, if there are more costs than benefits to district users of PBCA, then the program will not be successful. Statewide implementation of a program may be perceived by districts as restricting their autonomy, a cost many would be reluctant to pay. Further, a statewide implemented PBCA system may have differential impact on individual districts and types of districts (i.e., rural versus urban) and may result in perceptions of inequity.

7. Make PBCA attractive to students.

Students who are interested in accelerated learning opportunities or early graduation will be attracted to PBCA options provided they are aware of the availability of and requirements for PBCA. If PBCA as a statewide education option is to be cost-effective, it must be promoted to and used by the students it is meant to serve. To follow up on the PBCA needs assessment/marketing plan, students should be provided with information including course descriptions and objectives, prerequisites for electing PBCA options for each

course, study guides, and data about further opportunities available to students who elect to obtain some of their required credits through PBCA.

8. Recognize and promote external resource (e.g., university, parent, community) educational opportunities in developing PBCA programs.

Many parents, especially those of gifted and talented students, are strong advocates for accelerated and individualized learning. Parents who have invested additional, out-of-school resources in their children's education may often feel at odds with the limitations of the present school curriculum. One important component of the development of a statewide PBCA system is forming cooperative bonds with parents to increase opportunities for growth and learning both in and out of school.

CONCLUSIONS

Proficiency-based credit assessment is an emerging educational option throughout the country and in the state of Utah. While the current project has uncovered a number of issues which will determine how effective the future implementation of a PBCA system will be, there are many questions which have yet to be answered. The process of answering these further questions can also allow for the dissemination of information and sharing of resources that are pertinent to successful future use of PBCA options. If Utah is to embrace as a viable educational option for its students, it needs to do so as a concerted effort of state and local district policy makers.

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APPENDIX A: SURVEY OF STATE EDUCATION OFFICES PROFICIENCY-BASED CREDIT ASSESSMENT POLICIES AND PRACTICES

APPENDIX B: UTAH SCHOOL DISTRICT SURVEY ON PROFICIENCY-BASED CREDIT ASSESSMENT POLICIES AND PRACTICES

APPENDIX C: FORM A (Attachment to District Survey)

SOE 03-2625-14
7/90

SURVEY OF STATE EDUCATION OFFICES
PROFICIENCY-BASED CREDIT ASSESSMENT
POLICIES AND PRACTICES

State Office _____

Respondent's name, title, _____

and telephone number: _____

1) Are you familiar with the concept of proficiency-based credit assessment at the secondary school level?
   A) Not at all familiar
   B) A little familiar
   C) Somewhat familiar
   D) Quite familiar
   E) Very familiar

2) Are there any studies or projects which are underway or have been completed in your state to explore proficiency-based credit assessment?
   A) No.
   B) Yes. Please send copies of reports if complete or, if underway, describe them briefly in the space provided below.

3) Do you currently have a statewide policy which provides directives concerning the use of proficiency-based credit assessment options for high school credit?
   A) No.
   B) Yes. Please send copies of policy statements and provide any further description necessary in the space below.

4) If your answer to question #3 was YES, do you have specific statewide assessment methods (e.g., specific tests or evaluation procedures) which every district uses to award proficiency-based credit?
   A) No.
   B) Yes. Please enclose copies of any assessment devices, administration manuals, and other pertinent information. Use the space provided below for any further description as necessary.

5) If your answer to question #3 was NO, are you interested in developing statewide policies and procedures concerning proficiency-based credit assessment?
   A) Yes.
   B) No.
   If you have comments concerning why you responded YES or NO, please write them in the space below.

6) Approximately what proportion of the individual school districts in your state support or use proficiency-based credit assessment options? (Please enclose addresses for local school districts that may have more complete information.)
   A) All of the school districts support or use them
   B) Most of the school districts
   C) Some
   D) Very few
   E) None of the school districts support or use them
   F) Don't know

FINAL COMMENTS

Do you have any final comments about the place, need, and restriction of proficiency-based credit assessment? Please use the back of this page for further comments.

SOE 03-2625-12
7/90

UTAH SCHOOL DISTRICT SURVEY ON PROFICIENCY-BASED CREDIT ASSESSMENT POLICIES AND PRACTICES

School District: _____

Respondent's name, title, _____

and telephone #: _____

Superintendent's Signature: _____

1) Are you familiar with the concept of proficiency-based credit assessment at the secondary school level?
   A) Not at all familiar
   B) A little familiar
   C) Somewhat familiar
   D) Quite familiar
   E) Very familiar

2) Are there any studies or projects which are underway or have been completed in your district to explore proficiency-based credit assessment?
   A) No.
   B) Yes. Please send copies of reports if complete or, if underway, describe them briefly on the back side of this page.

3) Does the state need to provide additional information about the different ways proficiency-based credit can be obtained?
   A) Yes
   B) No

4) Approximately what percent of the students who graduated from high schools in your district last year obtained at least a half unit or more of high school credit by completing college extension or correspondence courses (exclude concurrent enrollment)? ____

5) Do you feel the option for credit by extension or correspondence courses should be encouraged or discouraged in the future? Your comments are welcome. Please comment on the back of this page.
   A) Encourage.
   B) Neutral.
   C) Discourage.

6) If you have any comments on how current or future state policies might facilitate or restrict district procedures around proficiency-based credit, please use the space provided below.

7) Do you have established district policy and procedures whereby students can receive credit for required general courses they have not taken through some other means of demonstrating proficiency (e.g., passing paper-and-pencil tests, presenting competency demonstrations, etc.)?
   A) Yes. [If YES, please fill out a copy of Form A for each course affected by this policy and enclose a copy of the policy statement.]
   B) No. [If NO, please continue on till the end of the questionnaire.]

8) Is it possible for students on a case-by-case basis to receive general course credit if they already have obtained (through employment or extracurricular activity) highly specialized, advanced knowledge in that area?
   A) No. [If NO, please answer questions 11-13 only.]
   B) Yes. [If YES, Please answer questions 9-13.]

9) Approximately what percent of the students who graduated from high schools in your district last year obtained at least a half unit or more of high school credit by demonstrating their specialized, advanced knowledge or experience? ___

10) Do you feel this proficiency-based credit option should be encouraged or discouraged in the future? Your comments are welcome.
   A) Encouraged.
   B) Neutral.
   C) Discouraged.

11) Do you want to adopt a district policy which allows students to receive course credit through demonstrating proficiency without actually taking specific courses?
   A) No, not at all.
   B) Yes, interested in considering it.
   C) Yes, currently formulating such a policy.

12) Please list any courses for which you would like to see proficiency-based credit options developed in the future.

13) Would you support the development and implementation of a statewide policy which would outline procedures for awarding proficiency-based credit?

If you have further comments or information concerning this issue, please write them below.

SOE 03-2625-13
7/90

Form A

Course: _____ Grade: _____

In what year was this proficiency-based credit option implemented?

_____

Since its implementation, how many students have applied (tried to use) this option? _____

How many students have received credit through this option? _____

Are there any prerequisites which a student must meet for trying to obtain proficiency-based credit? (If so, please describe).

_____

_____

Which of the following describe the method(s) used to assess the students' level of proficiency in the curriculum area? Please circle as many as are appropriate.

A) Supervisor/instructor evaluation
B) Paper-and-pencil examination
C) Evaluation of competency demonstration
D) Interview by one or more high school teachers
E) Completion of independent study project
F) None of the above; do not assess proficiency directly.
G) Other (please describe below).

_____

Please fill out the sections of the form on the following pages which correspond to the methods you indicated are used to assess proficiency-based credit for this course.

Supervisor/Instructor Evaluation:

What criteria are used for awarding credit (i.e., satisfactory performance; time worked, etc.)? _____

_____

Is there an evaluation form that is used to assess student performance? _____

If so, how was it created? If not, what does the evaluation consist of? Please include a copy. _____

_____

_____

_____

Paper-and-pencil Examination:

Who developed or published the written examination used? _____

_____

What is considered a passing score for credit and how was it established? _____

_____

Please describe the test's validity and reliability. _____

_____

_____

Please enclose a copy of the test, administration manual, and any additional technical information that exists.

Competency Demonstration:

Who evaluates the competency demonstration? _____

_____

Please describe how the demonstration is evaluated. _____

_____

_____

Interview by One or More High School Teachers:

Describe the objectives of the interview process and the criteria used to award credit. _____

_____

_____

If there is a form (e.g., checklist) to follow during the interview, please enclose it with the survey.

Independent Study Project:

Who is responsible for evaluating/grading the project? _____

_____

What are the criteria used to determine if the project merits a course credit? _____

_____

_____

If there is an independent study form contract, please include a copy.

Other

If you use any other method of assessment that is not described by this form, please describe it in the space provided below.

Jay B. Taggart
State Superintendent of Public Instruction

Utah State Office of Education
250 East 500 South
Salt Lake City, Utah 84111